

8th Annual Earth System Grid Federation Conference Agenda

Monday December 3, 2018 – Friday December 7, 2018

Location: Marriott Marquis 901 Massachusetts Ave NW Washington, DC 20001
Phone: (202) 824-9200

Remote participants:

Meeting link:

<https://llnl.webex.com/llnl/j.php?MTID=m5c93e04a952edf5baaa8b6bbe0bc1697>

Meeting number (access code): 809 520 875

Meeting password: esgf

JOIN BY PHONE

+1-415-655-0001 US TOLL

Global call-in numbers:

<https://llnl.webex.com/llnl/globalcallin.php?serviceType=MC&ED=740307447&tollFree=0>

Note:

After logging on, please send your full name and affiliation to Angela (jefferson9@llnl.gov) for remote conference registration.

Time	Topic
Monday, December 3, 2018	
2:00 p.m. – 4:00 p.m.	Pre-conference registration: Marriot Marquis Chinatown Foyer
5:00 p.m. – 6:00 p.m.	Social Activity: Meet and Greet (NO HOST) City Tap - Penn Quarter - 901 9th Street NW
Tuesday, December 4, 2018	
7:30 a.m. – 8:30 a.m.	Registration: Marriot Marquis Chinatown Foyer
7:00 a.m. – 8:30 a.m.	Continental Breakfast: Marriot Marquis Chinatown Room

Time	Topic												
8:30 a.m. – 8:50 a.m.	<p>Opening comments – Chinatown Room</p> <p>—Justin Hnilo, U.S. DOE’s Office of Biological and Environmental Research (BER) Program Manager for Data Management</p> <p>—Dean Williams or Michael Lautenschlager, Chair, ESGF Executive Committee</p> <ul style="list-style-type: none"> • How conference attendees contribute to the conference’s final report <p>Framing of the 2018 8th Annual ESGF F2F Conference</p> <p>—Angela Jefferson, Climate Program Executive Assistant LLNL Conference Logistics and Safety</p>												
8:50 a.m. – 10:20 a.m.	<p>Keynotes – Chinatown Room</p> <table border="1" data-bbox="440 684 1352 1308"> <tr> <td data-bbox="440 684 634 783">8:50 a.m. – 9:05 a.m.</td> <td data-bbox="634 684 1352 783">State of the Earth System Grid Federation (ESGF)—Luca Cinquini (NASA/JPL)</td> </tr> <tr> <td data-bbox="440 783 634 879">9:05 a.m. – 9:20 a.m.</td> <td data-bbox="634 783 1352 879">Sylvie Joussaume, CNRS-IPSL, European Network for Earth System modelling: IS-ENES3</td> </tr> <tr> <td data-bbox="440 879 634 978">9:20 a.m. – 9:35 a.m.</td> <td data-bbox="634 879 1352 978">David Bader (or Ghaleb Abdullah) – LLNL – DOE/LLNL direction</td> </tr> <tr> <td data-bbox="440 978 634 1077">9:35 a.m. – 9:50 a.m.</td> <td data-bbox="634 978 1352 1077">Tsengdar Lee, NASA directions</td> </tr> <tr> <td data-bbox="440 1077 634 1176">9:50 a.m. – 10:05 a.m.</td> <td data-bbox="634 1077 1352 1176">Ben Evans, NCI Australian directions</td> </tr> <tr> <td data-bbox="440 1176 634 1308">10:05 a.m. – 10:20 a.m.</td> <td data-bbox="634 1176 1352 1308">Tom Landry, CRIM – Cyberinfrastructure for Earth Observation and climate services in Canada: review of sustainability projects 2017-2027</td> </tr> </table>	8:50 a.m. – 9:05 a.m.	State of the Earth System Grid Federation (ESGF)—Luca Cinquini (NASA/JPL)	9:05 a.m. – 9:20 a.m.	Sylvie Joussaume, CNRS-IPSL, European Network for Earth System modelling: IS-ENES3	9:20 a.m. – 9:35 a.m.	David Bader (or Ghaleb Abdullah) – LLNL – DOE/LLNL direction	9:35 a.m. – 9:50 a.m.	Tsengdar Lee, NASA directions	9:50 a.m. – 10:05 a.m.	Ben Evans, NCI Australian directions	10:05 a.m. – 10:20 a.m.	Tom Landry, CRIM – Cyberinfrastructure for Earth Observation and climate services in Canada: review of sustainability projects 2017-2027
8:50 a.m. – 9:05 a.m.	State of the Earth System Grid Federation (ESGF)—Luca Cinquini (NASA/JPL)												
9:05 a.m. – 9:20 a.m.	Sylvie Joussaume, CNRS-IPSL, European Network for Earth System modelling: IS-ENES3												
9:20 a.m. – 9:35 a.m.	David Bader (or Ghaleb Abdullah) – LLNL – DOE/LLNL direction												
9:35 a.m. – 9:50 a.m.	Tsengdar Lee, NASA directions												
9:50 a.m. – 10:05 a.m.	Ben Evans, NCI Australian directions												
10:05 a.m. – 10:20 a.m.	Tom Landry, CRIM – Cyberinfrastructure for Earth Observation and climate services in Canada: review of sustainability projects 2017-2027												
10:20 a.m. – 10:40 a.m.	BREAK												
Project Requirements Session – Chinatown room													
10:40 a.m. – 12:00 noon	<table border="1" data-bbox="440 1591 1352 1881"> <tr> <td data-bbox="440 1591 634 1690">10:40 a.m. – 11:10 a.m.</td> <td data-bbox="634 1591 1352 1690">Karl Taylor, LLNL/PCMDI, CMIP6’s Reliance on ESGF Infrastructure: Present and Future</td> </tr> <tr> <td data-bbox="440 1690 634 1789">11:10 a.m. – 11:30 a.m.</td> <td data-bbox="634 1690 1352 1789">Peter Gleckler, LLNL/PCMDI Obs4MIPs: Progress and Plans</td> </tr> <tr> <td data-bbox="440 1789 634 1881">11:30 a.m. – 12:00 noon</td> <td data-bbox="634 1789 1352 1881">Plenary discussion</td> </tr> </table>	10:40 a.m. – 11:10 a.m.	Karl Taylor, LLNL/PCMDI, CMIP6’s Reliance on ESGF Infrastructure: Present and Future	11:10 a.m. – 11:30 a.m.	Peter Gleckler, LLNL/PCMDI Obs4MIPs: Progress and Plans	11:30 a.m. – 12:00 noon	Plenary discussion						
10:40 a.m. – 11:10 a.m.	Karl Taylor, LLNL/PCMDI, CMIP6’s Reliance on ESGF Infrastructure: Present and Future												
11:10 a.m. – 11:30 a.m.	Peter Gleckler, LLNL/PCMDI Obs4MIPs: Progress and Plans												
11:30 a.m. – 12:00 noon	Plenary discussion												

Time	Topic										
12:00 noon – 1:30 p.m.	Lunch										
1:30 p.m. – 3:00 p.m.	<p>ESGF Compute Services</p> <table border="1" data-bbox="440 464 1352 947"> <tr> <td data-bbox="440 464 634 558">1:30 p.m. – 1:50 p.m.</td> <td data-bbox="634 464 1352 558">Charles Doutriaux, LLNL/AIMS – State of the Compute Working Team and Compute Certification Process</td> </tr> <tr> <td data-bbox="440 558 634 653">1:50 p.m. – 2:10 p.m.</td> <td data-bbox="634 558 1352 653">Jason Boutté, LLNL/AIMS – Compute service cluster and deployment</td> </tr> <tr> <td data-bbox="440 653 634 747">2:10 p.m. – 2:30 p.m.</td> <td data-bbox="634 653 1352 747">Tom Maxwell, NASA, The Earth Data Analytics Services (EDAS) Framework</td> </tr> <tr> <td data-bbox="440 747 634 842">2:30 p.m. – 2:50 p.m.</td> <td data-bbox="634 747 1352 842">Stephan Kindermann, DKRZ, Copernicus CP4CDS compute service</td> </tr> <tr> <td data-bbox="440 842 634 947">2:50 p.m. – 3:20 p.m.</td> <td data-bbox="634 842 1352 947">Compute Node Challenge – Discussion and outline</td> </tr> </table>	1:30 p.m. – 1:50 p.m.	Charles Doutriaux, LLNL/AIMS – State of the Compute Working Team and Compute Certification Process	1:50 p.m. – 2:10 p.m.	Jason Boutté, LLNL/AIMS – Compute service cluster and deployment	2:10 p.m. – 2:30 p.m.	Tom Maxwell, NASA, The Earth Data Analytics Services (EDAS) Framework	2:30 p.m. – 2:50 p.m.	Stephan Kindermann, DKRZ, Copernicus CP4CDS compute service	2:50 p.m. – 3:20 p.m.	Compute Node Challenge – Discussion and outline
1:30 p.m. – 1:50 p.m.	Charles Doutriaux, LLNL/AIMS – State of the Compute Working Team and Compute Certification Process										
1:50 p.m. – 2:10 p.m.	Jason Boutté, LLNL/AIMS – Compute service cluster and deployment										
2:10 p.m. – 2:30 p.m.	Tom Maxwell, NASA, The Earth Data Analytics Services (EDAS) Framework										
2:30 p.m. – 2:50 p.m.	Stephan Kindermann, DKRZ, Copernicus CP4CDS compute service										
2:50 p.m. – 3:20 p.m.	Compute Node Challenge – Discussion and outline										
3:20 p.m. – 3:40 p.m.	BREAK										
3:40 p.m. – 5:00 p.m.	<p>Compute Services and Machine Learning– Chinatown room</p> <table border="1" data-bbox="440 1178 1352 1598"> <tr> <td data-bbox="440 1178 634 1272">3:40 p.m. – 4:00 p.m.</td> <td data-bbox="634 1178 1352 1272">Sandro Fiore, CMCC – High Performance Data Analytics and Machine Learning developments in Ophidia</td> </tr> <tr> <td data-bbox="440 1272 634 1398">4:00 p.m. – 4:20 p.m.</td> <td data-bbox="634 1272 1352 1398">Tom Landry, CRIM – OGC Testbed-14: Experiments on Machine Learning and on Earth Observation Exploitation Platforms</td> </tr> <tr> <td data-bbox="440 1398 634 1503">4:20 p.m. – 4:40 p.m.</td> <td data-bbox="634 1398 1352 1503">Sookyun Kim, LLNL/AIMS – Tracking and Predicting Extreme Climate Events using ConvLSTM</td> </tr> <tr> <td data-bbox="440 1503 634 1598">4:40 p.m. – 5:00 p.m.</td> <td data-bbox="634 1503 1352 1598">Plenary Discussion</td> </tr> </table>	3:40 p.m. – 4:00 p.m.	Sandro Fiore, CMCC – High Performance Data Analytics and Machine Learning developments in Ophidia	4:00 p.m. – 4:20 p.m.	Tom Landry, CRIM – OGC Testbed-14: Experiments on Machine Learning and on Earth Observation Exploitation Platforms	4:20 p.m. – 4:40 p.m.	Sookyun Kim, LLNL/AIMS – Tracking and Predicting Extreme Climate Events using ConvLSTM	4:40 p.m. – 5:00 p.m.	Plenary Discussion		
3:40 p.m. – 4:00 p.m.	Sandro Fiore, CMCC – High Performance Data Analytics and Machine Learning developments in Ophidia										
4:00 p.m. – 4:20 p.m.	Tom Landry, CRIM – OGC Testbed-14: Experiments on Machine Learning and on Earth Observation Exploitation Platforms										
4:20 p.m. – 4:40 p.m.	Sookyun Kim, LLNL/AIMS – Tracking and Predicting Extreme Climate Events using ConvLSTM										
4:40 p.m. – 5:00 p.m.	Plenary Discussion										

Time	Topic		
5:00 p.m. – 6:00 p.m.	Poster and Demo Session 1: Compute Services and Applications - Foyer		
	No.	Title	Name
	1	Web Processing Services Climate Analysis Workflows from a Python Interface (Demo)	D. Huard C. Ehbrecht B. Koziol
	2	Diagnostics Package for Energy Exascale Earth System Model (E3SM_diags)	C. Zhang Z. Shaheen C. Golaz
	3	High-dimensional Climate Data Visualization for Advanced Analysis	J. Lee K. Sperber C. Doutriaux
	4	CMOR	C. Mauzey C. Doutriaux K. Taylor
	5	Leveraging CAFÉ to enable a collaborative computing paradigm for climate model intercomparison	Y. Bai B. Wang T. Wu
6:00 p.m.	Adjourn Day 1		
Wednesday, December 5, 2018			
7:00 a.m. – 8:30 a.m.	Continental Breakfast: Chinatown Room		
8:30 a.m. – 11:20 a.m.	CMIP6 Services in ESGF – Chinatown room		
	8:30 a.m. – 8:50 a.m.	Sébastien Denvil, IPSL, State of CDNOT	
	8:50 a.m. – 9:10 a.m.	Martin Jukes, CEDA, Status and Outlook for the CMIP Data Request	

Time	Topic	
	9:10 a.m. – 9:30 a.m.	David Hassell, NCAS, The ES-DOC documentation workflow for CMIP6
	9:30 a.m. – 9:50 a.m.	Martina Stockhause, DKRZ, Data Citation Service – status and first experiences
	9:50 a.m. – 10:10 a.m.	Guillaume Levavasseur, IPSL, ESGF Errata Service – Production release and forms
	10:10 a.m. – 10:40 a.m.	BREAK
	10:40 a.m. – 11:00 a.m.	Atef Bennasser, IPSL, Synda
	11:00 a.m. – 11:20 a.m.	Alessandra Nuzzo, CMCC, ESGF Dashboard: data usage statistics on the Earth System Grid Federation
11:20 a.m. – 12:00 noon	CMIP6 Experience – Chinatown room	
	11:20 a.m. – 11:40 a.m.	Kate Snow, NCI, NCI production experience with CMIP6 (presented by Clare Richards)
	11:40 a.m. – 12:00 noon	Paul Durack, PCMDI/LLNL, input4MIPs: ESGF experiences of a 2-year-old project
12:00 noon – 1:30 p.m.	Lunch	
1:30 p.m. – 2:30 p.m.	ESGF Service Interoperability – Chinatown room	
	1:30 p.m. – 1:50 p.m.	Matt Pryor, CEDA, Containerising ESGF for CP4CDS
	1:50 p.m. – 2:10 p.m.	Philip Kershaw, CEDA, The application of ESGF to develop an Open Data Portal for ESA Climate Change Initiative
	2:10 p.m. – 2:30 p.m.	George Percivall, OGC, Climate Data in Geospatial Information Systems: ESGF and OGC coordination opportunities
2:30 p.m. – 5:00 p.m.	ESGF in Analysis Applications – Chinatown room	

Time	Topic																
	2:30 p.m. – 2:50 p.m.	Christian Pagé, CERFACS, C4I: Leveraging and Easing End Users' CMIP6 Access by Interfacing Infrastructures															
	2:50 p.m. – 3:10 p.m.	Tobias Weigel, DKRZ, ECAS - ENES Climate Analytics Service															
	3:10 p.m. – 3:30 p.m.	BREAK															
	3:30 p.m. – 3:50 p.m.	Ryan Abernathy, Columbia Univ., Pangeo: a flexible climate analytics infrastructure for climate data on ESGF															
	3:50 p.m. – 4:10 p.m.	Steve Petruzza, U. of Utah, Fully integrated solution for interactive data conversion, streaming, analysis and visualization of scientific data using containers and web-based technologies															
	4:10 p.m. – 4:30 p.m.	Carlos Downie, LLNL/AIMS, vCDAT a Web Based Data Visualization Suite for a Broader Community															
	4:30 p.m. – 5:00 p.m.	Plenary discussion on the day's topics: CMIP6, Service Interoperability, Analysis Applications															
5:00 p.m. – 6:00 p.m.	Poster Session 2: CMIP6 and Cloud - Foyer																
	<table border="1"> <thead> <tr> <th data-bbox="435 1136 548 1220">No.</th> <th data-bbox="548 1136 1052 1220">Title</th> <th data-bbox="1052 1136 1414 1220">Name</th> </tr> </thead> <tbody> <tr> <td data-bbox="435 1220 548 1381">6</td> <td data-bbox="548 1220 1052 1381">ESGF PID services status and future perspectives</td> <td data-bbox="1052 1220 1414 1381">T. Weigel S. Kindermann K. Berger</td> </tr> <tr> <td data-bbox="435 1381 548 1612">7</td> <td data-bbox="548 1381 1052 1612">Cooperation with Google for deploying ESGF Node on Google Cloud Platform</td> <td data-bbox="1052 1381 1414 1612">S. Nikonov H. Vahlenkamp A. Radhakrishnan K. Bhatia V. Balaji L. Cinquini</td> </tr> <tr> <td data-bbox="435 1612 548 1774">8</td> <td data-bbox="548 1612 1052 1774">An automated heterogeneous pipeline for managing CMIP6 ingestion, replication and publication at CEDA</td> <td data-bbox="1052 1612 1414 1774">R. Petrie A. Stephens A. Iwi</td> </tr> <tr> <td data-bbox="435 1774 548 1873">9</td> <td data-bbox="548 1774 1052 1873">How can the Coordinated Regional Climate Downscaling Experiment</td> <td data-bbox="1052 1774 1414 1873">H. Lee J. Han</td> </tr> </tbody> </table>		No.	Title	Name	6	ESGF PID services status and future perspectives	T. Weigel S. Kindermann K. Berger	7	Cooperation with Google for deploying ESGF Node on Google Cloud Platform	S. Nikonov H. Vahlenkamp A. Radhakrishnan K. Bhatia V. Balaji L. Cinquini	8	An automated heterogeneous pipeline for managing CMIP6 ingestion, replication and publication at CEDA	R. Petrie A. Stephens A. Iwi	9	How can the Coordinated Regional Climate Downscaling Experiment	H. Lee J. Han
No.	Title	Name															
6	ESGF PID services status and future perspectives	T. Weigel S. Kindermann K. Berger															
7	Cooperation with Google for deploying ESGF Node on Google Cloud Platform	S. Nikonov H. Vahlenkamp A. Radhakrishnan K. Bhatia V. Balaji L. Cinquini															
8	An automated heterogeneous pipeline for managing CMIP6 ingestion, replication and publication at CEDA	R. Petrie A. Stephens A. Iwi															
9	How can the Coordinated Regional Climate Downscaling Experiment	H. Lee J. Han															

Time	Topic	
		(CORDEX) community facilitate dissemination and analysis of the next generation climate simulations in the Cloud?
	10	Data long-term archival in the IPCC DDC and DDC Support
6:00 p.m.	Adjourn Day 2	
Thursday, December 6, 2018		
7:00 a.m. – 8:30 a.m.	Continental Breakfast: Chinatown Room	
8:30 a.m. – 12:00 noon	Topics from ESGF Working Teams – Chinatown Room	
	8:30 a.m. – 8:50 a.m.	Luca Cinquini, NASA/JPL, Next Generation ESGF Search Services
	8:50 a.m. – 9:10 a.m.	William Hill, LLNL/AIMS, ESGF Installer 3.0
	9:10 a.m. – 9:30 a.m.	Sébastien Gardoll, IPSL, ESGF Test Suite and Jenkins at IPSL
	9:30 a.m. – 9:50 a.m.	Sasha Ames, LLNL/AIMS, Working Teams Update: Publication and ESGF Services
	9:50 a.m. – 10:10 a.m.	Philip Kershaw, CEDA, Review of development activities for ESGF IdEA – Identity, Entitlement and Access Management
	10:10 a.m. – 10:30 a.m.	BREAK
	10:30 a.m. – 10:50 a.m.	Mark Greenslade, IPSL, Pyessv - A simple controlled vocabulary service
	10:50 a.m. – 11:10 a.m.	Denis Nadeau, LLNL/AIMS, Community Data Management Systems for CMIP6

Time	Topic										
	11:10 a.m. – 11:30 a.m.	Zeshawn Shaheen, LLNL/AIMS, Common Input Arguments with CDP									
	11:30 a.m. – 12:00 noon	Plenary Discussion on working group progress and plans									
12:00 noon – 1:30 p.m.	Lunch										
1:30 p.m. – 3:30 p.m.	<p>Rethinking of ESGF Architecture – Chinatown Room</p> <ul style="list-style-type: none"> • Phil Kershaw / Ben Evans: introduce discussion on next-generation architecture <ul style="list-style-type: none"> ○ Security ○ Containerization ○ Cloud infrastructure ○ Federation architecture ○ Data access 										
3:30 p.m. – 4:00 p.m.	BREAK										
4:00 p.m. – 5:00 p.m.	Awards Ceremony – Chinatown Room										
5:00 p.m. – 6:00 p.m.	<p>Poster Session 3: ESGF Working teams and next-generation ideas - Foyer</p> <table border="1" data-bbox="435 1524 1339 1837"> <thead> <tr> <th data-bbox="435 1524 548 1610">No.</th> <th data-bbox="548 1524 1053 1610">Title</th> <th data-bbox="1053 1524 1339 1610">Name</th> </tr> </thead> <tbody> <tr> <td data-bbox="435 1610 548 1707">11</td> <td data-bbox="548 1610 1053 1707">ESGF Installer validation with Jenkins</td> <td data-bbox="1053 1610 1339 1707">L. Muryanto S. Ames</td> </tr> <tr> <td data-bbox="435 1707 548 1837">12</td> <td data-bbox="548 1707 1053 1837">Applying object oriented design principles to installation processes</td> <td data-bbox="1053 1707 1339 1837">N. Carlson W. Hill S. Ames</td> </tr> </tbody> </table>		No.	Title	Name	11	ESGF Installer validation with Jenkins	L. Muryanto S. Ames	12	Applying object oriented design principles to installation processes	N. Carlson W. Hill S. Ames
No.	Title	Name									
11	ESGF Installer validation with Jenkins	L. Muryanto S. Ames									
12	Applying object oriented design principles to installation processes	N. Carlson W. Hill S. Ames									

Time	Topic		
	13	Nonactive ESGF Catalog Migration	Y. Shen L. Cinquini L. Carriere D. Duffy
	14	Towards a blockchain enabled ESGF	M. Greenslade
	15	Enhancing the ESGF data node to load balance a distributed cluster of THREDDS instances	E. Cimadevilla P. Celaya A.S. Confiño
6:00 p.m.	Adjourn Day 3		
Friday, December 7, 2018			
7:00 a.m. – 8:30 a.m.	Continental Breakfast: Chinatown Room		
8:30 a.m. – 10:30 a.m.	Breakout Session <ul style="list-style-type: none"> • ESGF Working teams – Chinatown Room <ul style="list-style-type: none"> ○ Discuss roadmaps and contribution to conference report • ESGF XC Meeting – Magnolia Room <ul style="list-style-type: none"> ○ 2019 priorities and implementation plan update ○ Next meeting schedule and location ○ ESGF as legal entity 		
10:30 a.m. – 11:00 a.m.	BREAK		
11:00 a.m. – 12:00 noon	Closing Plenary Session – Chinatown Room		
12:00 noon	Adjourn Day 4		
Conclusion of the 8th Annual ESGF F2F Conference			

